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ABSTRACT

This bibliography identifies multimedia weather resources for elementary and secondary schools in Arizona. Content of the materials includes weather forecasting techniques, storms, clouds, the atmosphere, wind, radar, humidity, precipitation, and world climate regions. The first section of the bibliography lists 47 books, most of which were published during the 1960s. Information is given on author, title, publisher, and date. Section two identifies 16-millimeter films: 18 are available from commercial publishers and 25 can be rented through the Central Arizona Film Cooperative at Arizona State University. For these films, information is given on title, date, length, color or black/white, cost, and grade level. Sections three and four list five eight-millimeter loop movies and seven sound filmstrips. Grade levels, source, and cost are given for these. Sections five through 11 identify seven slide sets, 22 transparency sets, three audio cassettes, nine maps and charts, 15 pamphlets, one game, and one multimedia kit. Concluding sections list five sources of meteorological instruments and addresses of sources for all items listed in previous sections. (AV)

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THE LABORATORY OF CLIMATOLOGY

ARIZONA STATE UNIVERSITY

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A MULTIMEDIA BIBLIOGRAPHY OF WEATHER MATERIALS FOR SCHOOLS

Steven Roseman and Henry Ray, Editors

Climatological Publications
Bibliography Series No. 2
1977

Additional copies of this publication are available from the Office of the State Climatologist at the Laboratory of Climatology, Arizona State University, Tempe, AZ 85281.

$3.00

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PREFACE

The developing awareness of the relevance of meteorology to the total physical environment by progressive school teachers and administrators has led to the recognition that the study of weather is an integral part of any comprehensive school curriculum. Recent requests by Arizona school systems to the Laboratory of Climatology for professional assistance in curriculum development and guest speaker programs has led Dr. Robert Durrenberger, State Climatologist for Arizona, to suggest the development of a multimedia bibliography of weather source materials for all schools in Arizona. This bibliography is in response to the lack of a single source that enumerates multimedia materials currently available in the field of meteorology.

To compile such a comprehensive bibliography, a wide variety of sources had to be consulted. A starting point was the Westinghouse Learning Directory and catalogs from the National Information Center for Educational Media. Supplemental materials were obtained from directories of Free and Inexpensive Learning Materials, the Central Arizona Film Cooperative of Arizona State University, and numerous media material catalogs.

It has been impossible to review or include all available multimedia sources in this list of weather materials. Teachers, school administrators, and other users of this bibliography may be aware of materials which the editors have overlooked. Therefore, any comments or suggestions concerning the content of this publication would be welcomed.

This bibliography could not have been prepared without the helpful assistance of the staff of the Laboratory of Climatology. Special thanks are extended to the following staff members: Patti Norton for typing; Mrs. Borgny Johnson and Peggy Alden for proof-reading; and Dr. Robert Durrenberger for his professional assistance.

Steven Roseman and Henry Ray, Editors
Laboratory of Climatology
April 1, 1977

A MULTIMEDIA BIBLIOGRAPHY OF WEATHER MATERIALS FOR SCHOOLS

BOOKS

Adler, I. 1959. Weather in Your Life. New York: John Day Co.

Anthes, R. et al. 1975. The Atmosphere. Columbus: Ohio, Charles E. Merrill Co.

Battan, L.J. 1962. Cloud Physics and Cloud Seeding. New York: Anchor.

_____. 1967. The Unclean Sky. New York: Doubleday.

_____. 1969. The Nature of Violent Storms. New York: Doubleday.

_____. 1974. Weather. Englewood Cliffs: Prentice-Hall.

Bell, C. 1957. Wonder of Snow. New York: Hill and Wang.

Bell, T.H. 1960. Snow. New York: Viking.

_____. 1960. Thunderstorm. New York: Viking.

Blair, T.A.; and Fite, R.C. 1964. Weather Elements: a text in elementary meteorology. 5th ed. Englewood Cliffs: Prentice-Hall.

Bonsall, G. 1960. The How and Why Book of Weather. New York: Gosset.

Byers, R. 1959. General Meteorology. New York: McGraw-Hill Book Co.

Cantzlaar, G.L. 1964. Your Guide to the Weather. New York: Barnes and Noble.

Clausse, R., and Faey, L. 1961. The Clouds. New York: Grove.

Day, J. 1966. The Science of Weather. Massachusetts: Addison-Wesely.

Disney, W. 1960. Man and Weather Satellites. New York: Golden Press.

Fisher, R.M. 1953. How to Know and Predict the Weather. New York: The New American Library of World Literature.

Forrester, F.H. 1957. 1001 Questions Answered About the Weather. New York: Dodd Mead & Co.

Forsdyke, A.G. 1971. Weather and Weather Forecasting. New York: Bantam Books.

Hare, F.K. 1963. The Restless Atmosphere. rev. ed. New York: Harper.

Harris, M.F. 1962. Man Against Storm: The Challenge of Weather. New York: Coward.

Holmes, D.C. 1963. The Story of Weather. New York: Pyramid Publications.

Kimble, G.H.T. 1955. Our American Weather. New York: McGraw-Hill.

Knight, D.C. 1964. The Science Book of Meteorology; An Introduction to the Atmosphere and its Phenomena with a Special Section on the World Meteorological Organization. New York: Franklin Watts, Inc.

Laird, C. and Laird, R. 1955. Weathercasting; A Handbook of Amateur Meteorology. Englwood Cliffs: Prentice-Hall.

Leeds, W.L. 1962. Weather and You. Columbus, Ohio: American Education Publications.

Lehr, P.E., Burnett, R., and Zim, H.S. 1957. Weather: Air Masses, Clouds, Rainfall, Storms, Weather Maps, Climate. New York: Simon & Schuster.

Lehr, P.E. 1964. Weather. New York: Golden Press.

Loebsack, Th. 1961. Our Atmosphere. New York: Mentor Books.

Longstreet, T.M. 1962. Understanding the Weather. New York: Collier Books.

Mason, B.J. 1962. Clouds, Rain, and Rainmaking. New York: Cambridge Univ. Press.

Miller, A. 1966. Meteorology. (Physical Science Series) Columbus, Ohio: Merrill.

Riehl, H. 1963. Introduction to the Atmosphere. New York: McGraw-Hill.

Schneider, H. 1961. Everyday Weather and How It Works. rev. ed. New York: McGraw-Hill.

Schonland, B. 1964. The Flight of the Thunderbolt. 2nd ed. Oxford: The Clarendon Press.

Sloane, E. 1962. How You Can Forecast the Weather. New York: Premier.

_____. 1963. Eric Sloane's Weather Library. New York and Des Moines: The Meredith Press (Duell). 3 vols.

Spilhaus, A.F. 1951. Weathercraft. New York: Viking.

Stambler, I. 1963. Breath of Life. New York: Putnam.

Stewart, G.R. 1947. Storm. New York: Modern Library (254).

Sutcliff, R.C. 1966. Weather & Climate. New York: W.W. Norton & Co.

Sutton, O.G. 1960. Understanding Weather. Baltimore: Pelican.

_____. 1969. The Challenge of the Atmosphere. 2nd ed. Riverside, Conn.: Greenwood Press.

Syrocki, B.J. et al. 1960. What Is Weather. Chicago: Benefic.

Thompson, P.D. and O'Brien, R. 1969. Weather. New York: Time-Life Books.

Wells, R. 1962. Weather Forecasting as a Hobby. Hammond, N.J.: Maplewood.

Wolfe, L. 1961. Probing the Atmosphere. New York: Putnam.

16 MM FILMS

TITLE	DATE	LENGTH	TYPE	SOURCE
A New Look at Fog	1967	13 min.	C*	Serina Press
Air Masses and Fronts - Air Masses	1962	12 min.	C	Serina Press
Air Weather Service of USAF	1966	14 min.	C	Dept. of Air Force
Bomex	--	15 min.	C	NOAA
Gate to World Weather	1975	28 min.	C	NOAA
Hurricane	1969	27 min.	C	Aetna Life & Casulty
Mountain Skywater	1971	27 min.	C	Bureau of Reclamation
Pressure Systems and Wind	1963	19 min.	C	Serina Press
Radar Eyes the Weather, Part A	1961	25 min.	C	Dept. of Air Force
Radar Eyes the Weather, Part B	1961	21 min.	C	Dept. of Air Force

*C = Color

TITLE	DATE	LENGTH	TYPE	SOURCE
Rivers in the Sky	1967	28½ min.	C	Bureau of Reclamation
Survival in the Winter Storm	1974	27 min.	C	Defense Civil Preparedness Agency
The Origins of Weather	1970	13 min.	C	Serina Press
The Unchained Goddess	1969	59 min.	C	Western Electric
Tornado	--	15 min.	C	NOAA
Tornado Below	1975	14½ min.	C	NASA
Weather and Radar	1953	17 min.	C	Serina Press
You and the Weather	1956	25 min.	C	Texaco, Inc.

Cost on these films is postage only

CENTRAL ARIZONA FILM COOPERATIVE
Arizona State University
- 16 mm Films -

TITLE	DATE	LENGTH	TYPE	COST	GRADE
A Story of a Storm	1950	11 min.	B&W	*	J-A
Climate and the World We Live In	1957	14 min.	B&W		J-C
Clouds Above	1964	10 min.	C		I-C
Clouds of the Hemisphere	1969	8 min.	C		I-S
Evidence for the Ice Age	1965	19 min.	C		I-S
Eyes in Outer Space	1960	26 min.	C		P-I
Fronts and Storms	1965	11 min.	C		I-J
Great Winds - Distribution of Pressure & Winds	1951	11 min.	B&W		J-S
Great Winds - General Circulation	1951	10 min.	B&W		I-S

TITLE	DATE	LENGTH	TYPE	COST	GRADE
How Weather is Forecast	1972	11 min.	C		I
Myth, Superstition and Science	1963	13 min.	C		J-C
Pressure and Humidity	1965	10 min.	C		I-J
Sky	1962	10 min.	C		J-C
Temperature and Wind	1965	8 min.	C		I-J
The Atmosphere in Motion	1973	20 min.	C		--
The Great Weather Mystery	1961	27 min.	B&W		J-C
The Inconstant Air	1961	27 min.	C		J-SA
Urban Impact on Weather and Climate	1971	16 min.	C		J-C
Weather Scientists	1961	14 min.	C		I-J
Weather - Understanding Storms	1962	11 min.	B&W		I-J
Weather - Why It Changes	1958	11 min.	C		I-J
Weatherman - The, Community Helper	1970	10 min.	C		P-I
What Makes Clouds	1965	19 min.	C		I-S
What Makes the Wind Blow	1965	16 min.	C		I-S
Winds and Their Causes	1967	11 min.	C		I-S

Type
C = Color
B&W = Black & White

Cost - Free to Cooperative Members
Non-member Rental Rates:

	1-3 Days	5 Days
1-11 min.	7.50	9.50
12-22 min.	10.50	12.50
23-33 min.	13.00	15.00

Grade Level
P = Primary
I = Intermediate
J = Junior High
S = Secondary
C = College
A = Adult Level

MOVIE S 8 MM LOOP

TITLE	COST	SOURCE	GRADE
Clouds	20.00	BFA Educ. Media	P-J
Precipitation	20.00	BFA Educ. Media	P-J
Pressure and Air Temperature	20.00	BFA Educ. Media	P-J
The Cold Front	20.00	BFA Educ. Media	P-J
Thunderstorm	20.00	BFA Educ. Media	P-J

SOUND FILMSTRIP

TITLE	COST	SOURCE	GRADE
Air Masses and Weather Fronts	9.00	Soc. for Visual Ed.	I-J
How to Forecast the Weather	9.00	Soc. for Visual Ed.	I-J
Humidity and How it Affects Us	9.00	Soc. for Visual Ed.	I-J
Moisture and Precipitation in the Air	9.00	Soc. for Visual Ed.	I-J
New Methods of Forecasting Weather	15.00	H.M. Stone	J-H
Studying Everyday Weather	14.00	Curriculm Mat. Corp.	I-J
Understanding Weather & Climate (set of six)	39.50	Soc. for Visual Ed.	I-J

SLIDES

TITLE	DATE	TYPE	NUMBER	RUNNING TIME	SOURCE
Air Masses and Fronts	1965	C	51 slides	20 min.	FAA
Fog, Stratus and Icing	1965	C	46 slides	17 min.	FAA
Stability in the Atmosphere	1965	C	43 slides	19 min.	FAA

TITLE	DATE	TYPE	NUMBER	RUNNING TIME	SOURCE
The Atmosphere	1965	C	58 slides	23 min.	FAA
Thunderstorms and Turbulence	1965	C	57 slides	22 min.	FAA
Weather Surveilance Radar-Part 1	1966	C	71 slides	29 min.	FAA
Weather Surveilance Radar-Part 2	1967	C	76 slides	46 min.	FAA

TRANSPARENCIES

TITLE	NUMBER INCLUDED	COST	SOURCE
Climate	1 ea.	2.95	Denoyer - Geppert
Cold Front	1 ea.	3.95	Instructo
Cold Front	4 ea.	5.50	Int'l Educ. & Training
Highs and Lows	1 ea.	3.65	GAF Reprographic
How Rain is Formed	4 ea.	5.50	Int'l Educ. & Training
How Snow is Formed	5 ea.	5.50	Int'l Educ. & Training
Hurricanes	1 ea.	3.95	Instructo
Land and Sea Breezes	1 ea.	2.50	Educational Supply
Layers of the Atmosphere	1 ea.	6.50	Creative Visuals
Meteorology (set of 9)		34.50	Hubbard (ETW 1040)
Meteorology (set of 7)		36.00	Creative Visuals
Meteorology and Climatology (12 ea. 16 duplicating)		6.95	Milliken (TED 04)
Occluded Front	5 ea.	5.50	Int'l Educ. & Training
Primary Wind Systems	5 ea.	5.50	Int'l Educ. & Training
Thunderstorm	4 ea.	5.50	Int'l Educ. & Training
Tornadoes	1 ea.	2.95	Instructo

TITLE	NUMBER INCLUDED	COST	SOURCE
Warm Front	3 ea.	5.50	Int'l Educ. & Training
Warm Front	1 ea.	3.95	Instructo
Weather (set of 6)		21.00	Hubbard (ETW 1530)
Weather Instruments	1 ea.	2.50	Educational Supply
Weather Set 1	6 ea.	20.00	Wilkins-Anderson
Wind Circulation	1 ea.	4.75	Denoyer-Geppert
World Climate Regions	1 ea.	5.05	GAF Reprographic

AUDIO CASSETTE

TITLE	COST	SOURCE	GRADE
United States Weather Patterns	8.50	Electronic Futures	I
Weather Climate and Man (set 8)	63.60	Electronic Futures	I
Weather Instruments and Forecasting	8.50	Electronic Futures	I

MAPS & CHARTS

TITLE	SIZE	COST	SOURCE
Air and Weather	10 ea.	3.00	Instructor Pubs.
Climagraph	44"x50"	12.95	George F. Cram Co.
Climagraph	pad of 50	2.00	George F. Cram Co.
Cram's Weather Map (Markable-kleenable surface)	1 ea.	9.00	George F. Cram Co.
Formation of Clouds	1 ea.	12.50	Denoyer-Geppert
Project Weather Map	50 ea.	1.50	Wilkins-Anderson
Wall Chart Climagraph	1 ea.	12.95	Ward's Nat. Science
Wall Chart Weather Map	1 ea.	15.00	Ward's Nat. Science
Weather Plotting Map	1 ea.	7.95	Instructo

PAMPHLETS, GAMES AND CLASSROOM KITS
(Free or Inexpensive)

TITLE	QUANTITY AVAILABLE	SOURCE
Aerospace Bulletin - "The Severe Local Storm"	----	Parks College
Changing the Weather	----	Educational Services
Climate and Weather	Single copy free; additional 25¢ ea.	Encyclopedia Britannica
How Temperatures are Measured	Classroom quantities	Tempil Division
How's your Weather IQ?	Classroom quantities	Taylor Instrument
Instructions for Home Weather Forecasting	Classroom quantities	Taylor Instrument
Meteorology	Classroom quantities	American Meteorological Society
Smog and Weather	----	National Coal Association
Teaching Weather and Climate	----	National Council for Geographic Education
The Life and Death of a Hurricane	----	General Electric Co.
Tropical Storm Agnes	Limit of 10 copies	U.S. Army Engineer Division
Weather, Astronomy and Meteorology	----	Supt. of Documents Gov't Printing Ofc.
Weather and You	Classroom quantities	American Education Publications, Inc.
Weather Information (7 bulletins)	Single copies	U.S. Dept. of Comm. NOAA
What is This Thing Called Humidity?	Classroom quantities	Taylor Instrument

GAME: Understanding Weather and Climate Word Games - $6.00
Soc. for Visual Ed.

MULTIMEDIA KIT: Science Kit on Meteorology
Jeppesen Sanderson
Education Division
8025 East 40th Avenue
Denver, Colorado 80207

WEATHER AND METEOROLOGICAL INSTRUMENTS

Alpine Clock Shop
Thomas Mall
Phoenix, Arizona
Tel: 959-6170

Science Associates
230 Nassau Street
Box 230
Princeton, New Jersey 08540

Taylor Instrument Company
John C. Gaspers
Filtemp Sales Inc.
PO Box 15173
3850 E. Indian School Rd.
Phoenix, Arizona 85060
Tel: 955-3910

Ward's Natural Science Establishment, Inc.
Biology, Earth Science & Chemistry
PO Box 1749
Monterey, California 93940

Weather Measure Corporation
Larry J. Kluth
Route 9, Box 127
Apache Jct., Arizona 85220
Tel: 602-982-2980

ADDRESSES OF SOURCES

Aetna Life and Casualty
Public Relations and Advertising Dept.
151 Farmington Ave.
Hartford, Connecticut 06115

American Education Publications
Education Center
Columbus, Ohio 43216

American Meteorological Society
45 Beacon St.
Boston, Massachusetts 02108

BFA Educational Media
2211 Michigan Ave.
Santa Monica, California 90404

George F. Cram Company, Inc.
School and Library Division
PO Box 426
301 South La Salle St.
Indianapolis, Indiana 46206

Creative Visuals
Box 1911
Big Spring, Texas 79720

Denoyer-Geppert Company
Public Relations Dept.
5235 Ravenswood Ave.
Chicago, Illinois 60640

Department of the Air Force
The Pentagon
Washington, D.C. 20330

Educational Services
National Educational Television
10 Columbus Circle
New York, New York 10019

Educational Supply Co., Inc.
PO Box 517
Synder, Texas 79549

Electronic Futures, Inc.
57 Dodge Ave.
North Haven, Connecticut 06473

Encyclopedia Britannica Educational Corporation
425 North Michigan Ave.
Chicago, Illinois 60611

Public Affairs Office
Office of the Chief of Engineers
Washington, D.C. 20314
or nearest office

Federal Aviation Administration
FAA Academy
Film Library, AC-921
PO Box 25082
Oklahoma City, Oklahoma 73125

Federal Preparedness Agency
General Services Bldg.
Eighteenth and F Streets NW
Washington, D.C. 20405

GAF Corporation Reprographic Products
140 West 51 St.
New York, New York 10020

General Electric Educational Films
60 Washington Ave.
Schenectady, New York 12305

Hubbard
2855 Shermer Road
Northbrook, Illinois 60062

Instructo Corporation
Paoli, Pennsylvania 19301

Instructor Publications, Inc.
Dansville, New York 14437

International Education & Training, Inc.
1776 New Highway
Farmingdale, New York 11735

Milliken Publishing Company
611 Olive Street
St. Louis, Missouri 63101

National Aeronautics & Space Admin.
CODE FAD
Washington, D.C. 20546

National Coal Association
Education Division
Coal Building
1130 17th St., N.W.
Washington, D.C. 20036

National Council for Geographic Education
Room 1532
111 W. Washington St.
Chicago, Illinois 60602

Serina Press
70 Kennedy Street
Alexandria, Virginia 22305

Society for Visual Education, Inc.
1345 Diversey Parkway
Chicago, Illinois 60614

H.M. Stone Productions
6 East 45th Street
New York, New York 10017

Supt. of Documents
Gov't Printing Office
Washington, D.C. 20402

Taylor Instrument Company
Consumer Products Division
Arden, North Carolina 28704

Tempil Division
132 W. 22nd Street
New York, New York 10011

Texaco, Inc.
135 E. 42nd Street
New York, New York 10017

U.S. Dept. of Commerce
National Oceanic and Atmospheric Administration
Rockville, Maryland 20852

Ward's Natural Science Establishment
PO Box 1749
Monterey, California 93940

Western Electric Company
Motion Picture Bureau
Public Relations
195 Broadway
New York, New York 10007

Wilkins-Anderson
4525 W. Division Street
Chicago, Illinois 60651